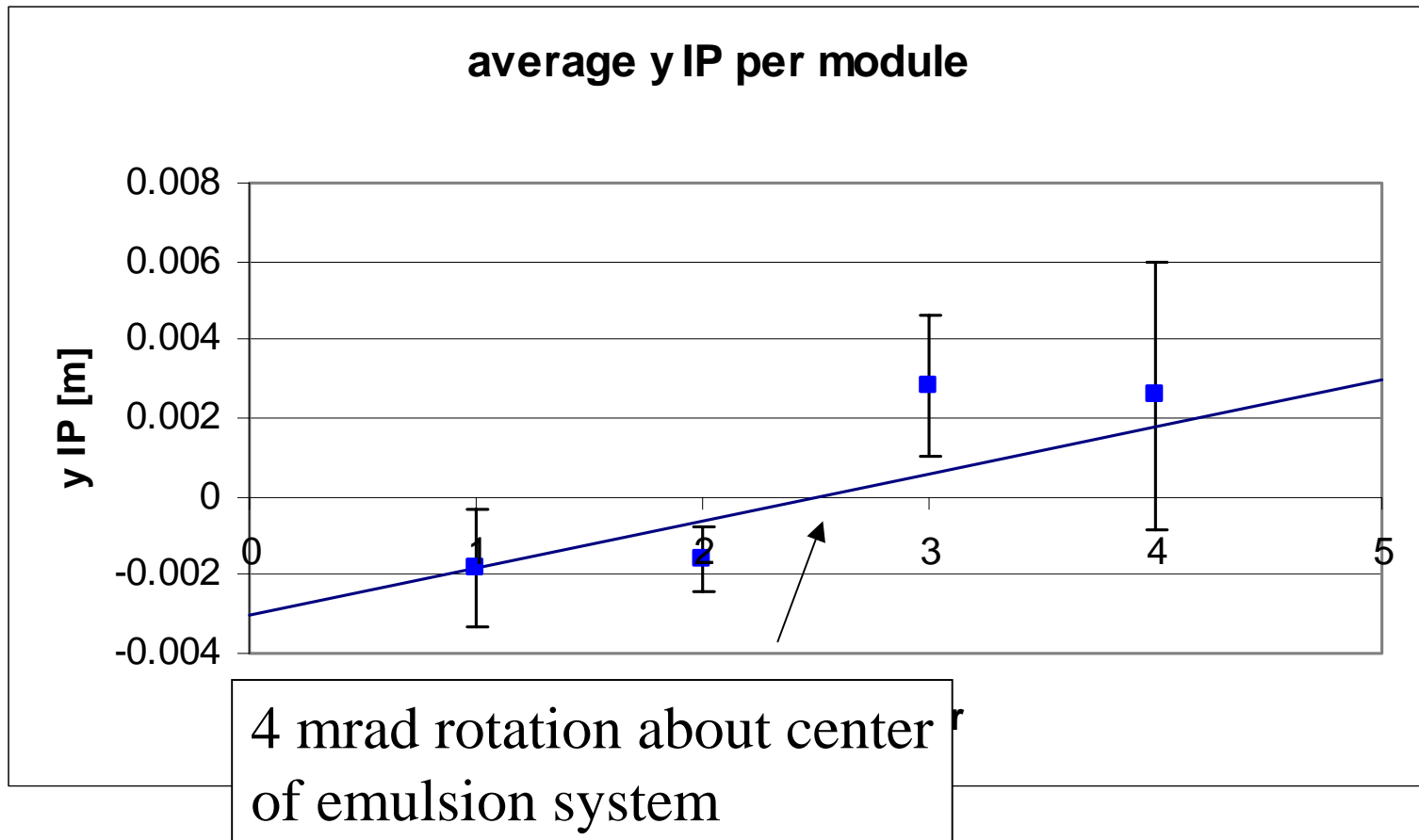# More Muons

Patrick Berghaus

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08/15/00

Expansion of muon sample
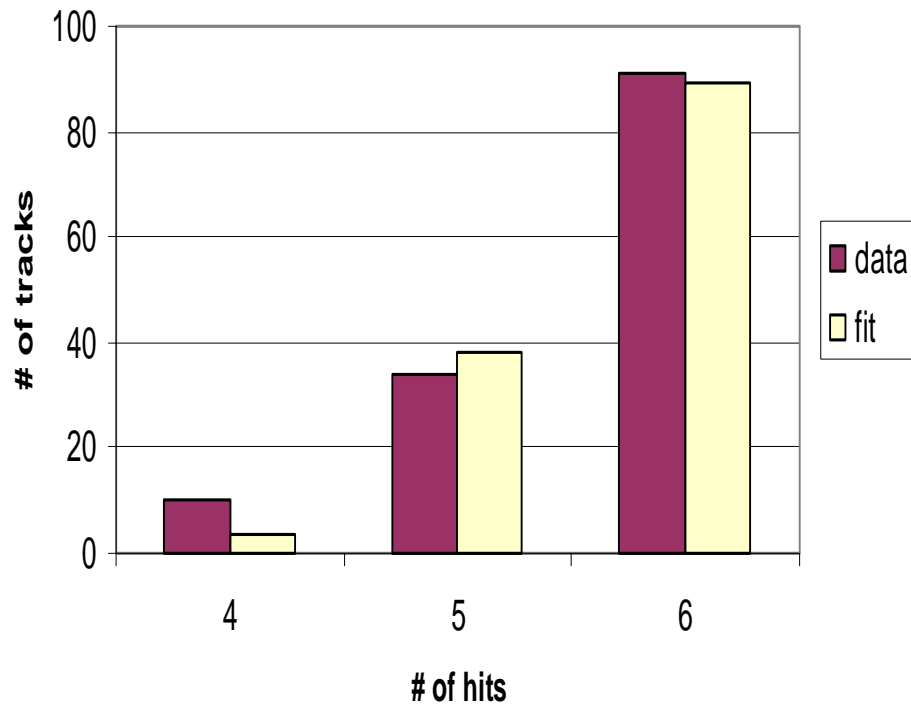
- Include muon tracks with 4 mu-ID hits
- Allow tracks with only 1 C-wall hit
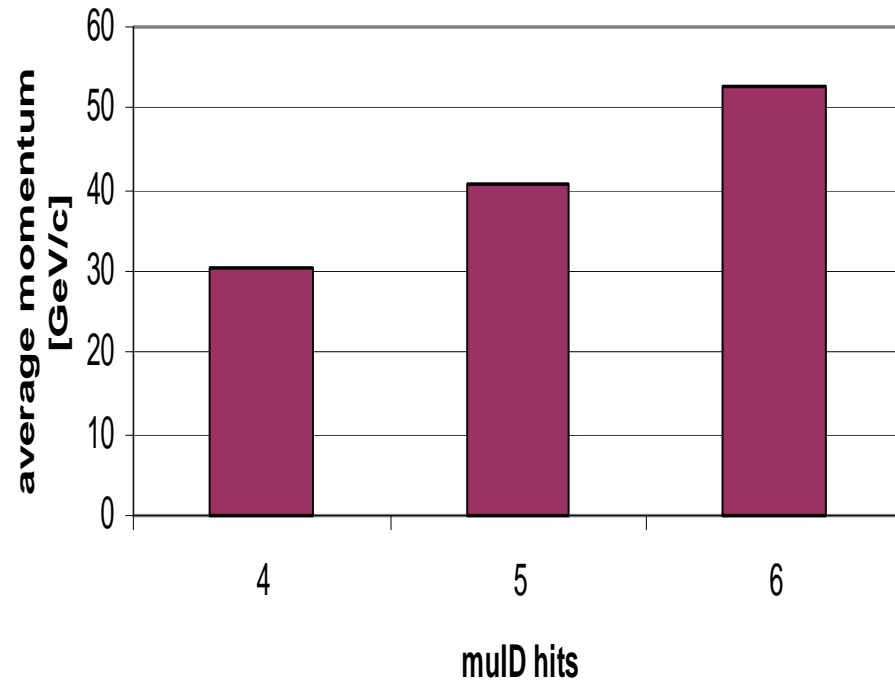- Use non-located events

Emulsion/DC alignment

average y IP per module
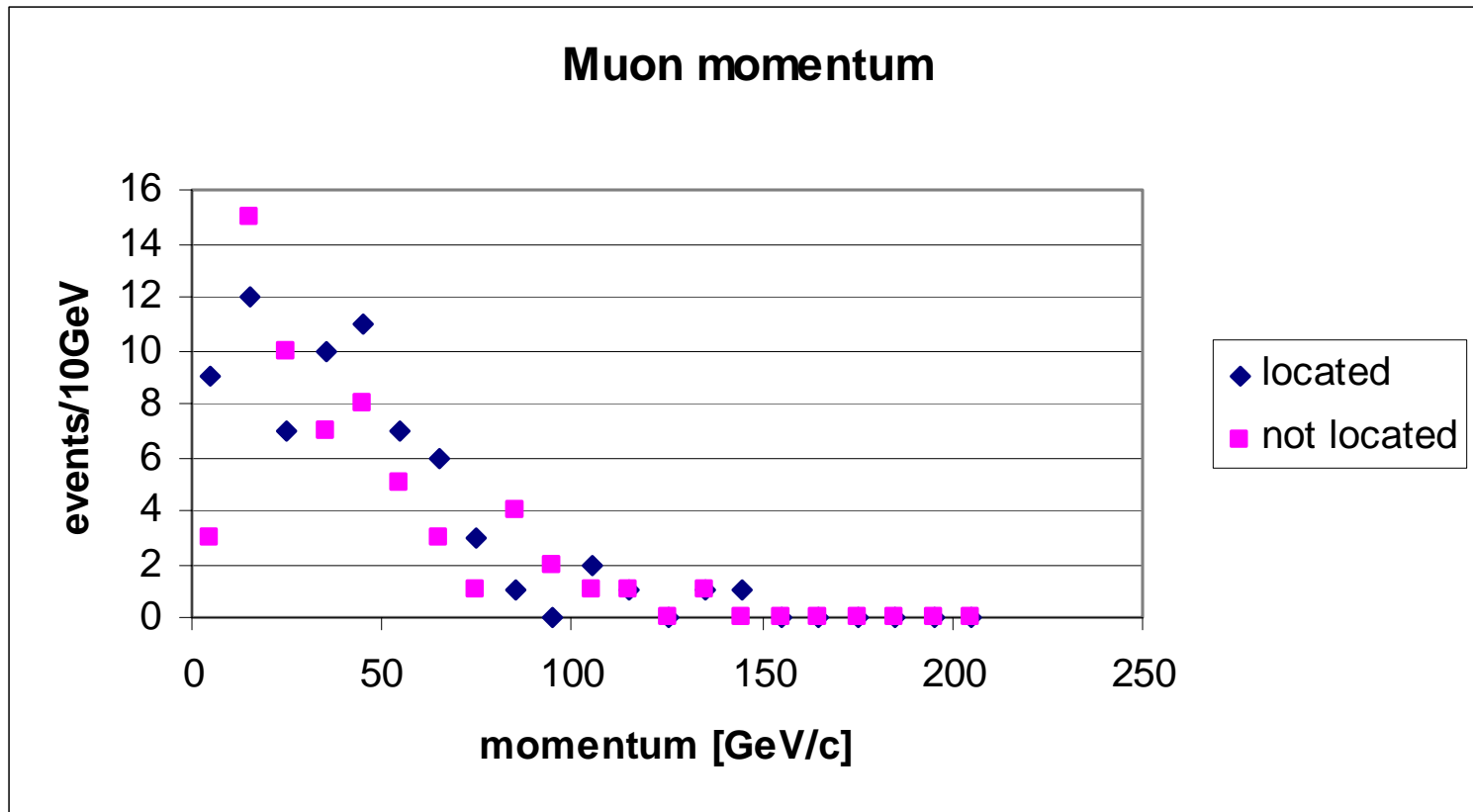
4 mrad rotation about center
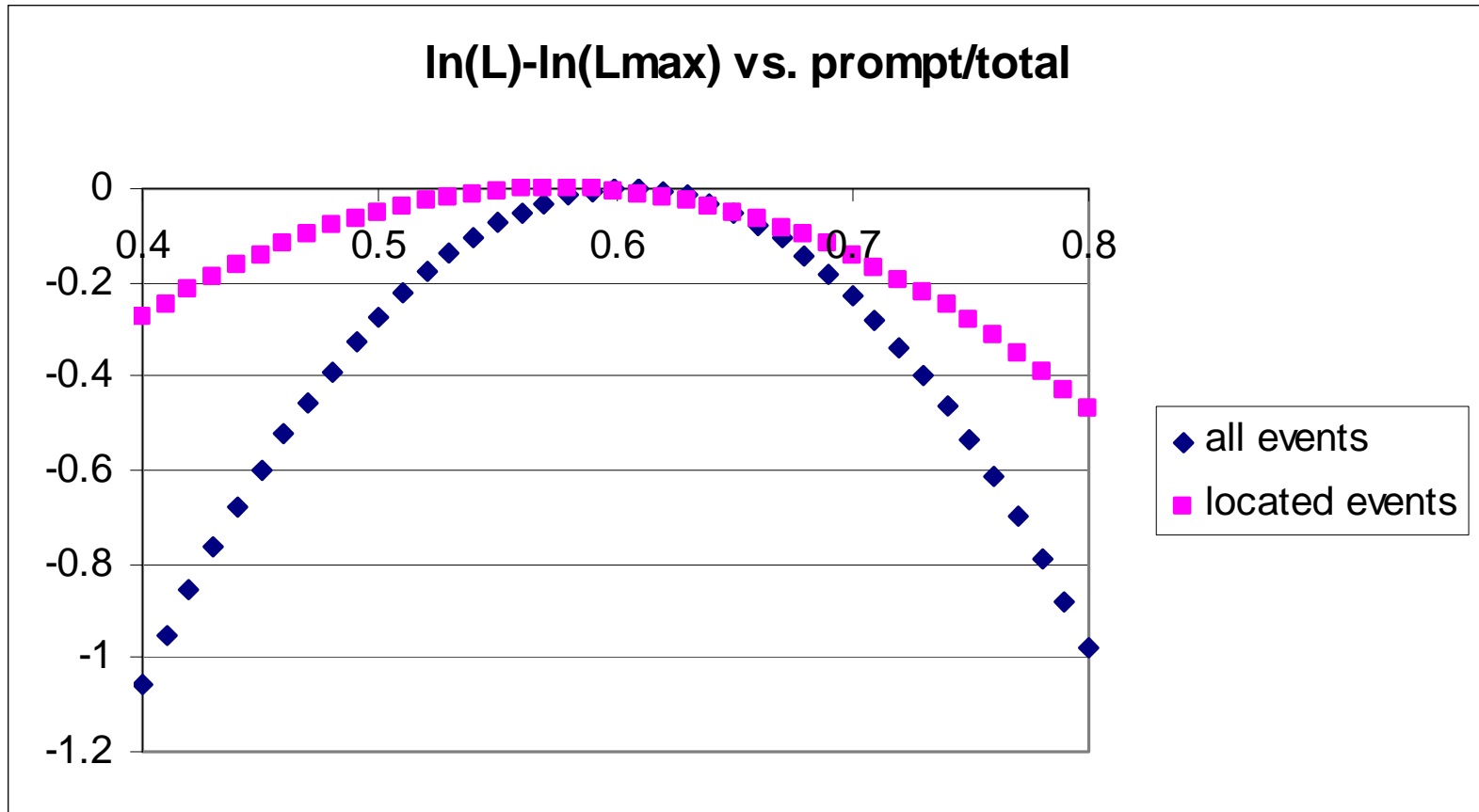of emulsion system

Effect of new mu-ID criteria

Problems with 4-hit events

- More than would be expected for uniform mu-ID efficiency

- Momentum dependence

- Cannot be explained with multiple scattering (actually missing hits in mu-ID)

Located vs. not located

Prompt/nonprompt ratio

ln(L)-ln(Lmax) vs. prompt/total

Legend:
- ◆ all events
- ■ located events

Summary

- Relaxing mu-ID constraint changes result significantly for unknown reasons

- Not located event sample is consistent with located (also: 27% muon events in both cases) and improves error estimate on maximum likelihood fit